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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/752,709	01/08/2004	John H. Hayes	010628.50474C3	5556
23911	7590	10/16/2007		
CROWELL & MORING LLP			EXAMINER	
INTELLECTUAL PROPERTY GROUP			CONLEY, FREDRICK C	
P.O. BOX 14300			ART UNIT	PAPER NUMBER
WASHINGTON, DC 20044-4300			3673	
			MAIL DATE	DELIVERY MODE
			10/16/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/752,709	HAYES, JOHN H.
	Examiner	Art Unit
	FREDRICK C. CONLEY	3673

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 25 July 2007.  
 2a) This action is FINAL.                            2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-8 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-8 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO/SB/08)  
 Paper No(s)/Mail Date \_\_\_\_\_

4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date. \_\_\_\_\_

5) Notice of Informal Patent Application

6) Other: \_\_\_\_\_

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 5, and 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 4,947,500 to Seiler in view of U.S. Pat. No. 6,253,401 to Boyd.

Claims 1 and 8, Seiler discloses a mattress system, comprising:

a mattress (1,2,3) having a top surface defined by an upper strip 3 and a bottom surface defined by a base layer 1;

a cavity arranged in the mattress, the cavity being open at least toward the top surface and having a defined size;

an expandable cushion (4-9) arranged in the cavity;

a mattress protector (19,20) covering at least the top surface of the mattress, the protector including a first portion defined by an insert 19 that extends into the cavity and a second portion defined by a cover layer 20 that extends over the expandable cushion arranged in the cavity; and

a control system 17 operatively coupled with the cushion to control an expansion and contraction of the cushion, wherein the control system includes a fluidic pump 18 arranged to pump fluid into the expandable cushion, a fluid relief mechanism arranged to allow fluid to escape the expandable cushion (col. 3-4 lines 66-68 & 1-10), and a the

control system defining a fluid pressure switch operable to automatically maintain a defined pressure level in the expandable cushion during a given cycle (col. 4 lines 11-21). Seiler fails to disclose the control system maintaining the pressure within the cushion. Boyd discloses a control system that maintains the pressure within a cushion (col. 2-3 lines 66-67 & 1-13). It would have been obvious for one having ordinary skill in the art at the time of the invention to employ a control system as taught by Boyd in order for the user to conveniently maintain desired pressures (col. 3 lines 12-13).

Claim 2, wherein the fluid is air, and wherein a control switch is provided to control an inflation and deflation of the expandable cushion.

Claim 3, wherein the control switch is inherently an electric control switch.

Claim 5, wherein the fluid is air.

Claim 7, wherein the fluid relief mechanism allows the fluid to escape the expandable cushion to maintain the defined pressure level.

Claims 4 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 4,947,500 to Seiler in view of U.S. Pat. No. 6,253,401 to Boyd as applied to claim 1, and further in view of U.S. Pat. No. 4,867,140 to Hovis et al.

With regards to claims 4 and 6, Seiler, as modified, discloses all of the Applicant's claimed limitations except for a reservoir and the fluid being a liquid. Hovis discloses an inflatable device having a reservoir 62 and employing a liquid (col.. 2 lines 65-68). It would have been obvious for one having ordinary skill in the art at the time of the invention to employ a reservoir and liquid as taught by Hovis in order to pressurize the system of Seiler.

### ***Response to Arguments***

Applicant's arguments filed 7/25/07 have been fully considered but they are not persuasive. The control system as recited in the Applicant's claim is comprised of a fluidic pump arranged to pump fluid into the expandable cushion, a fluid relief mechanism arranged to allow fluid to escape the expandable cushion, and a fluid pressure switch operable to automatically maintain a defined pressure level in the expandable cushion. As stated in the rejection, a control system of Seiler is defined by a control device 17 that is operatively coupled with the cushion to control an expansion and contraction of the cushion, wherein the control system includes a fluidic pump 18 arranged to pump fluid into the expandable cushion, a fluid relief mechanism arranged to allow fluid to escape the expandable cushion (col. 3-4 lines 66-68 & 1-10), and a the control system defining a fluid pressure switch operable to automatically maintain a defined pressure level in the expandable cushion during a given cycle since "the control device serves the purpose of selecting the desired or required pumping and operating cycle as well as for inserting pauses of programmable duration of up to 30 minutes between the individual steps of the cycle, as well as for freely choosing the times for inflation and deflation, suitable values for these times having been found to be in the range of 1 to 3 minutes and preferably between 2 and 3 minutes" as explicitly recited by Seiler (col. 4 lines 11-21). The control system of Seiler is silent to maintaining the pressure within the cushion. However, Boyd discloses a control system that is capable of maintaining the pressure within a cushion. Boyd explicitly recites that "the control 31

includes a gauge 41 for measuring the air pressure supplied by the pump to the various air chambers. The gauge has associated therewith a display 43 for displaying the measured pressure. It should be appreciated that the measured pressure may vary from chamber to chamber as desired by the user. The pressure for the various chambers may be measured sequentially as each chamber is inflated or, alternatively, separate gauges may be associated with each chamber to simultaneously measure the pressure in each chamber. The display, in this latter case, may display the measured pressures sequentially, or a larger display may be used to display all pressures simultaneously. Control 31 preferably includes a memory 45 for recording the desired pressures in each air chamber, so that the user may conveniently re-inflate the chambers to the desired pressures time after time" (col. 2-3 lines 66-67 & 1-13).

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, both Seiler and Boyd disclose pressurized air mattresses and the ability to control the pressure as taught by Boyd would enhance the therapeutic mattress of Seiler to make specific pressures at any one point of the skin as small as possible and keep adequate higher

pressures on the skin within allowable time limits as the patient is moved along the mattress. Therefore, the combination of references would provide a control system, as broadly recited in the claims, that is inherently capable of maintaining the cushion pressure in accordance with a weight of the user in proportion to a firmness of the mattress. The Applicant relies upon vague and broad structural language that fails to clearly distinguish the present invention over the interpretation made over the prior art. Furthermore, the Applicant's own disclosure and claims do not support any structure or structural limitations that have not already been disclosed by the prior art or well known to those having obvious skill in the art.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to FREDRICK C. CONLEY whose telephone number is 571-272-7040. The examiner can normally be reached on M-TH.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, PATRICIA L. ENGLE can be reached on 571-272-6660. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

FC



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10-15-07